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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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08/15/2001

Eugene Lee

3981-16

2391

27683

7590

04/04/2006

HAYNES AND BOONE, LLP  
901 MAIN STREET, SUITE 3100  
DALLAS, TX 75202

EXAMINER

HARPER, KEVIN C

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/930,764

Applicant(s)

LEE ET AL.

Examiner

Kevin C. Harper

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3,5-16,18,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,12-14 and 16 is/are allowed.
- 6) ☒ Claim(s) 5,6,8,9,11,15,18,21 and 22 is/are rejected.
- 7) ☒ Claim(s) 7 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### ***Response to Arguments***

The indicated allowability of claims 5 and 15 are withdrawn in further consideration of Hedge et al. The indicated allowability of claims 6, 8, 11, 18 and 21-22 are withdrawn in view of the newly discovered reference(s) to Chan et al. (US 6,449,283). Rejections based on the newly cited reference(s) follow.

### ***Drawings***

Replacement drawings were received on March 23, 2006. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 5 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Hegde et al. (US 6,810,031).

1. Regarding claims 5 and 15, Hedge discloses a data rate controller (fig. 2, item 108; fig. 3, item 108; col. 6, lines 51-57) for controlling a rate that data is transferred over a backplane (fig. 1, item 110 in a network processing device (fig. 1). The data rate controller comprises a bandwidth allocator to allocate bandwidth to an input port (col. 7, lines 1-3, 43-47 and 66-67), a bandwidth limiter to identify a maximum allowable bandwidth for an input port (col. 7, lines 48-55), and a bandwidth tracker to identify an allocated bandwidth and to prevent the input port from connecting to the output port when the bandwidth is used up (col. 7, line 66 through col. 8, line 5). The bandwidth tracker is disabled from counting up when the maximum allowable

bandwidth has been reached (col. 7, lines 55-57). Further regarding claim 15, the bandwidth is assigned based on a bandwidth allocation to time slot period ratio (figs. 4-7; col. 6, lines 55-58).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6, 8-9, 11, 18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hedge et al. (US 6,810,031) in view of Chao et al. (US 6,449,283).

2. Regarding claims 6, 8-9, 11, 18 and 21-22, Hedge discloses a data rate controller as described in the rejection of claims 5 and 15 above. However, Hedge does not disclose multiple rate controllers assigned to each input-output port combination in the network processing device. Chao discloses multiple rate controllers (fig. 11, input arbiters; col. 12, lines 39-46) assigned to each input-output port combination (fig. 11, VOQ). Further regarding claims 9 and 11, the

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selection is based on priority (col. 31, lines 27-31) and packet weight (col. 16, lines 42-43; note: the input port may have several transmissions per cycle), and the arbiters conduct arbitrations for all VOQs dedicated to the same output ports (col. 16, lines 47-49) and conducts arbitrations for input port grants (col. 16, lines 46-47). Further regarding claims 21-22, the limitations of claim 21 have been addressed in the rejection of claim 15 above; Chao discloses a second set of data rate controllers that control the rate at which data is received by the output ports (fig. 11; col. 12, lines 41-42; col. 16, lines 26-29). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have multiple rate controllers in the invention of Hedge in order to provide a rate control for a port (Chao, col. 16, lines 26-32 and 45-47).

### ***Allowable Subject Matter***

3. Claims 3, 12-14 and 16 are allowed.
4. Claims 7 and 10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached at 571-272-7629. The centralized fax number for the Patent

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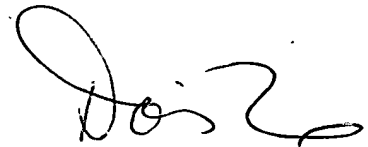
Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is [kevin.harper@uspto.gov](mailto:kevin.harper@uspto.gov).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see [portal.uspto.gov](http://portal.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

March 30, 2006



**DORIS H. TO**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**